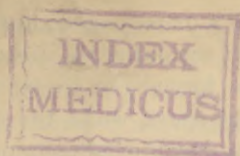


Pynchon (E.)

[Reprint from *The Laryngoscope*, St. Louis, February, 1897.]



## INSTRUMENTS USED IN TONSILLOTOMY BY ELECTRO-CAUTERY DISSECTION.

BY EDWIN PYNCHON, M.D., CHICAGO, ILL.

Late Instructor in Rhinology and Laryngology Chicago Post-Graduate Medical School;  
Assistant Aural Surgeon Illinois Charitable Eye and Ear Infirmary; Attending  
Surgeon for Diseases of the Nose and Throat at Clinic of the Illinois  
Medical College.

In the removal of abnormal tonsils by electro-cautery dissection I have found the following-described instruments of value, they having been modified or devised to meet the requirements of the operation. To assist in the production of cocaine anaesthesia I often use a long hypodermic syringe, and with it inject in both the anterior and pos-

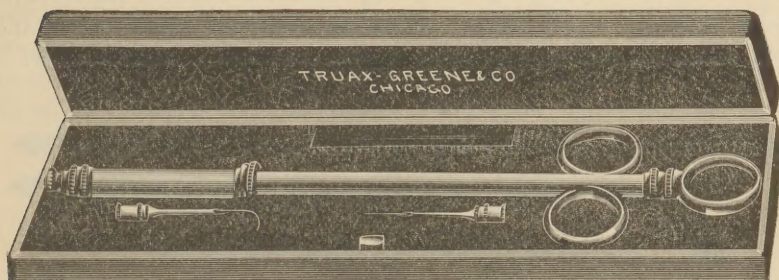
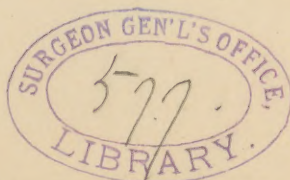


FIGURE 1. Tonsil Syringe (half size).

terior pillars of the side to be operated upon a few minims of a 4-per-cent. cocaine solution. There is no appreciable effect derived from making the injection into the tissue of the tonsil, but a few minims injected under the mucous membrane of the pillars will give a good result. When properly injected a bleb is produced, which will for several minutes remain visible. The barrel of this syringe is made of metal, and the lower cap, after being screwed thereupon, is soldered, so as to do away with the leather washer at this point, which is always of necessity employed with the glass barrel. Another argument in favor of the metal as compared with the glass syringe barrel is that the calibre of the latter is seldom uniform, and hence the action of the



piston is not so regular, while with a metal barrel absolute accuracy is possible. And again, who cares to see either the piston or the solution being used? If desired, the former can always be easily examined and oiled by taking the syringe apart, while the quantity of the latter can be surely known and gauged by the indicator on the piston rod and the regulating nut upon the same; so I again repeat, why so often, in all hypodermic syringes, is the unreliable, breakable and unnecessary glass barrel to be met with, particularly as corrosive solutions are not employed?

Returning to the tonsil syringe under discussion, there is supplied therewith a cap to be tightly screwed upon the opening when the needle has been removed, which prevents drying of the piston washers.

The syringe, beyond the barrel, is sufficiently lengthened to permit of easy use in the fauces; and, to facilitate its being used with one hand, is provided with ring handles at either side and a ring terminus to the piston rod. Each syringe is supplied with two needles, and all are encased in a neat leather box, as shown in cut.

In many cases I omit the use of the syringe, and get the required anæsthesia by applying a solution of cocaine, varying in strength from 20 to 33 per cent., with a probe wrapped with cotton. I have found for this purpose an advantage in having probes of extra length and size, as shown in cuts. They are made of soft brass, nickel-plated.

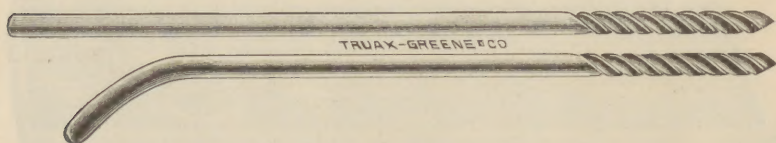


FIGURE 2. Cotton Carrier Probes (two-thirds size).

In order to draw the tonsil forward toward the median line I use a spring-toothed forceps. I have tried different kinds and styles of for-



FIGURE 3. Spring Tonsil Forceps (half size).

ceps, with and without locking devices, some being of the scissors form of construction, but have found the simple form shown to be the most desirable, as with its use the part engaged can be instantly re-



leased if the patient is about to gag. The slide lock is a particular abomination to be avoided. While the forceps with moderately fine teeth, as shown in Fig. 3, is generally satisfactory, there are occasionally met with cases in which the tonsil surface is so soft and friable that a forceps is required with long enough tenacula to pierce through and into the deeper and firmer tissue below. In such cases I use the spring tenacula forceps here shown.

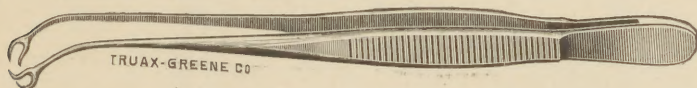


FIGURE 4. Spring Tenacula Tonsil Forceps (half size).

Either of these forceps will also be found of value in pulling forward a tonsil through the ring of a tonsillotome when an ordinary tonsillotomy is being done with any of the standard ring guillotines.

In making the dissection in my electro-cautery operation\* I use a variety of cautery points, bent at angles from the shaft varying from  $30^{\circ}$  to  $90^{\circ}$ , with the bend either vertical or lateral from the line of the handle; and, being reversible, the former can be directed either up or down, and the latter either to the right or left. I have found those points or electrodes which are  $5\frac{1}{2}$  inches long most convenient to use. I will append illustrations showing the two extremes of either style.

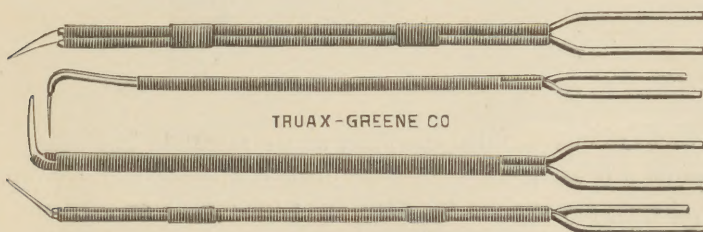


FIGURE 5. Electrodes for Electro-Cautery Dissection (two-thirds size).

The tongue depressor that I have found most satisfactory is here shown, and was fully described in the *Chicago Medical Recorder* for March, 1895. In this tongue depressor are two long and narrow parallel fenestræ, which tend to grasp the tongue and prevent its slipping, while, by being narrow, a flabby tongue cannot project up and through them so as to obstruct the view or become injured. The blade has

\**Jour. Am. Med. Assn.*, Nov. 22, 1890.

enough width to prevent its slipping to one side, and when in the median line is wide enough to prevent the edges of the tongue curling up at either side.

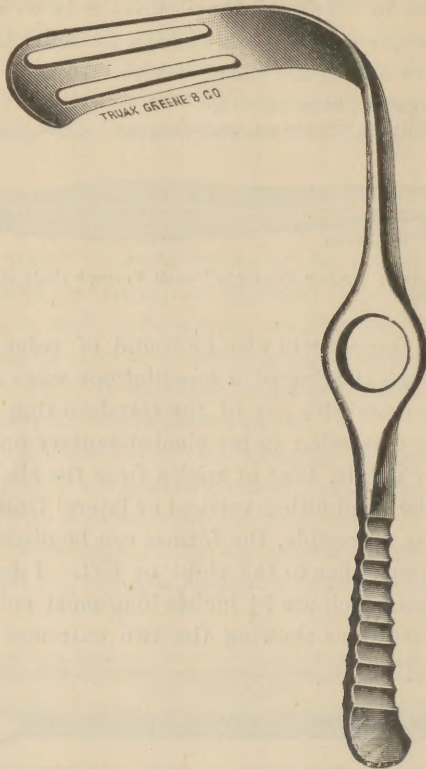


FIGURE 6. Operating Tongue Depressor (half size).

In order to increase the grasp and better facilitate any examination for which it is used, the end of the blade is given a slight downward bend, thereby assisting in the drawing of the tongue forward and away from the posterior pharyngeal wall.

Half-way down the handle a ring is provided, large enough to admit the index finger, and is placed at a right-angle to the flat of the handle. This ring will be found of the greatest utility when the patient is requested to assist by holding the depressor.

The lower end of the handle is corrugated at either side, which is found to give the best surface for a handle. Corrugations in this place, from an aseptic standpoint, are not objectionable, as when found in the blade.

Columbus Memorial Building.